

Socio-economic issues Related to GMO's



science
& technology

Department:
Science and Technology
REPUBLIC OF SOUTH AFRICA

Ben Durham
Chief Director: Bio-innovation
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Background on SE considerations

GMO developers must believe & have evidence that their GMO will have some market advantage.

- If correct, the market will actively seek their product.



ie. GMOs are designed to have socio-economic impact.

The State can have various roles:

- Ensuring societal interests / rights
- Verification of information
- Monopoly prevention
- Quality control
- Taxation
- etc





However...

- The public controversy and debate around GMOs is not characterized by facts & evidence, but by world views & ideologies.
- We may all view Socio-economic considerations of GMO introductions as necessary, but the purpose may be poles apart.
- While not discriminating against world views, and celebrating diversity, the state must focus on facts & evidence.

Content:

- International negotiations on SE considerations
- SA approach to SE considerations
- Conclusions





Socio-economic considerations internationally: Cartagena Protocol

Article 26, paragraph 1, states:

“The Parties, in reaching a decision on import under this Protocol or under its domestic measures implementing the Protocol, **may** take into account, consistent with their international obligations, socio-economic considerations **arising from the impact of living modified organisms on the conservation and sustainable use of biological diversity**, especially with regard to the value of biological diversity to indigenous and local communities.”

COP/MOP (Dec 2016) extended the mandate of the Ad Hoc Technical Expert Group (AHTEG) on Socio-economic Considerations to allow it to meet face-to-face to work on the guidelines (Oct 2017)





Socio-economic considerations internationally: Cartagena Protocol

AHTEG meeting:

Slovenia:

23 experts from the following Parties:

Austria; Belarus; Bolivia; Brazil; China; Dominican Republic; European Union; France; Germany; Honduras; Hungary; India; Mauritania; Mexico; Niger; Nigeria; Norway; Philippines; Republic of Korea; Republic of Moldova; Slovenia; South Africa; and Thailand.

Five experts from the following observer countries and organizations:
Canada; Third World Network; Global Industry Coalition; GENØK – Centre for Biosafety; and International Indigenous Forum on Biodiversity.



Socio-economic considerations internationally: Cartagena Protocol

Personal perspectives: SE Considerations AHTEG meeting

Cons

- Countries reluctant to adopt GM foods predominate.
- Interpretation of Article 26.1 varies from indirect effects to direct effects.
- “Methods chosen should be science-based and evidence-based, or be based on other accepted approaches **where scientific methods are not applicable**, subject to national practices and requirements”.
- More and more details/methodologies, with associated expectations.

Pros

- “Problem statement” introduced.
- Benefits remain in the recommendation, not merely risks.
- Prevented: indigenous communities to give national consent
- Prevented: recommendation for AHTEG to continue.





SA approach

DEPARTMENT OF AGRICULTURE, FORESTRY AND FISHERIES

No. R. 120

26 February 2010

GENETICALLY MODIFIED ORGANISMS ACT, 1997
(ACT No. 15 OF 1997)

REGULATIONS

Applications and decision-making

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- (d) if so determined by the Council, an assessment, in accordance with the provisions of the National Environmental Management Act, 1998 (Act No. 107 of 1998) and any other applicable laws, of the impact of the proposed activity on the environment and an assessment of the socio-economic considerations of the activity.





SA approach

Socio-economic considerations

5. (1) An assessment of socio-economic impact may include but is not limited to information on the impact of the activity on the following –
- (a) the continued existence and range of diversity of the biological resources,
 - (b) access to genetic and other natural resources previously available,
 - (c) cultural traditions, knowledge, and practices,
 - (d) income, competitiveness or economic markets, and
 - (e) food security.





SA approach

- All GMO permit applications must be considered by the Scientific Advisory Committee, and their recommendations are tabled at the Executive Council meetings
- All field trial and general releases must be preceded by public notification.
- All comments arising from the public are considered by the Exec Council.
- Permit approval decisions made by the Exec Council must be by consensus
- Consumer Protection Act requires labelling of GMOs and goods containing GM ingredients.



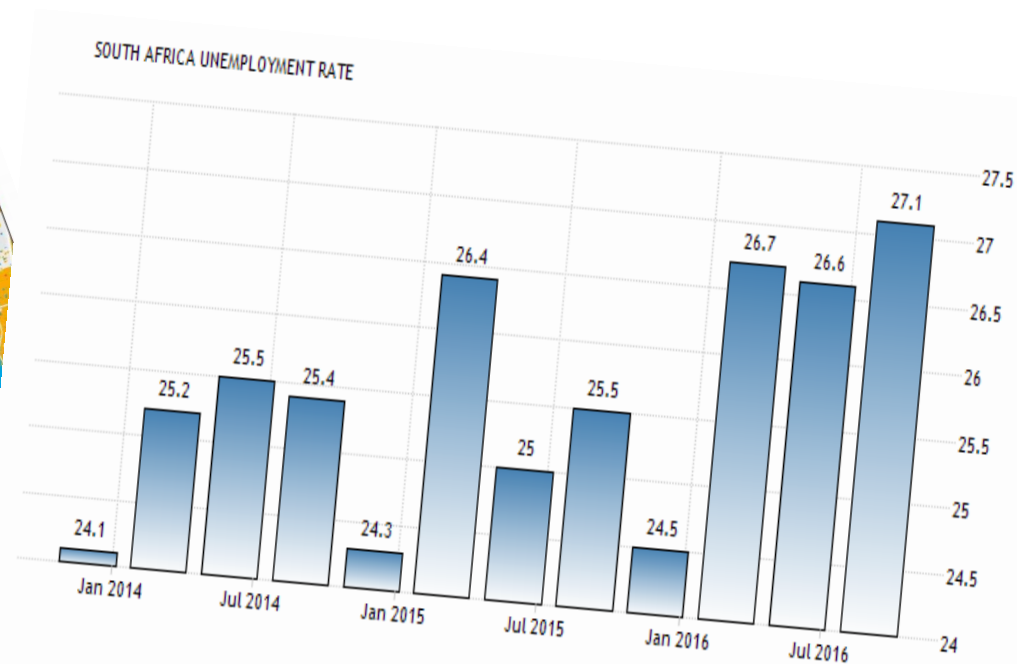
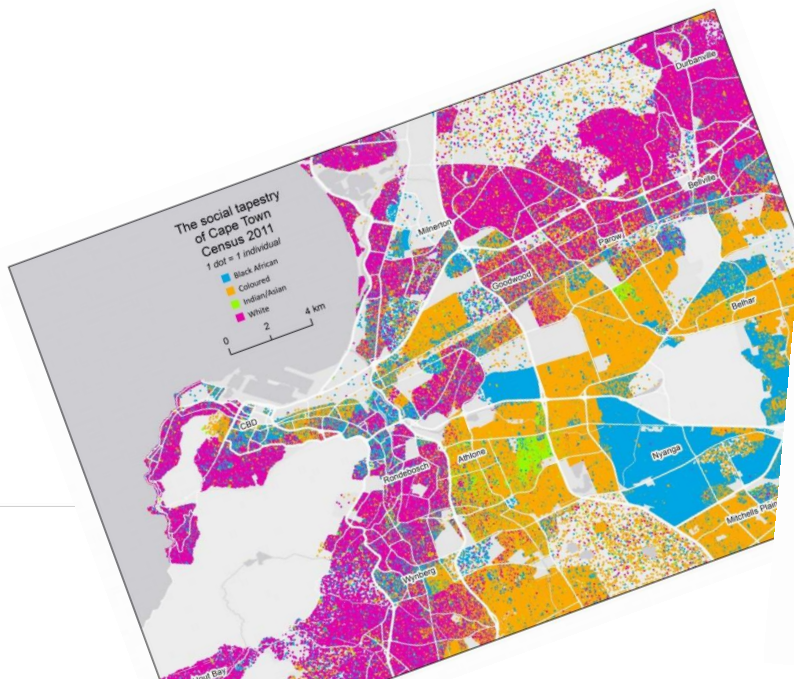
SA context

Huge unemployment/poverty/inequality

(27.1%, expanded-36.3% (2016); 45.5% living below upper poverty line; Gini ~0.65-0.69 (2011 data, StatsSA), life expectancy at birth 49.7 years of age in 2015, NIA of NIH (versus 60 WHO, 61 Stats SA).)

Household Food Security

SA ranks 44th out of 113 countries in terms of food security (2017). But only 45% of households in SA are considered food secure





National priorities: outcomes

- 1: Improved quality of basic education
- 2: A long and healthy life for all South Africans
- 4: Decent employment through inclusive growth,
- 5: Establish a credible institutional mechanism for skills planning
- 6: An efficient, competitive and responsive economic infrastructure network,
- 7: Vibrant, equitable and sustainable rural communities and food security for all,
- 8: Sustainable human settlements and improved quality of household life,
- 9: A responsive, accountable, effective and efficient local government system,
- 10: Environmental assets and natural resources that are well protected and continually enhanced,
- 12: An efficient, effective and development oriented public service and an empowered, fair and inclusive citizenship,





Exec Council position

- South Africa is unlikely to introduce a GMO that is considered likely to have negative environmental/biodiversity impacts (beyond that which is normal for the conventional (i.e. non-GMO) counterpart), and thus the socio-economic considerations of Article 26 (i.e. arising from biodiversity impacts) are unlikely to be invoked deliberately in South Africa.
- Socio-economics are part of the considerations for all GMO introductions into South Africa, and therefore South Africa would – within a context of internationally acceptable practices and agreements - respect any nation's sovereign right to consider socio-economic impacts;
- As a GM - adopting nation, South Africa would not want socio-economic considerations in its trading partners to be a lengthy, costly process of uncertain outcome, which could be used deliberately to delay the acceptance of a GMO trade commodity.





Conclusion

Effectively, GMO's in SA must be:

Safe to both human and animal health, and to the environment, **(GMO Act)**

Should contribute to:

1. Competitiveness of the SA farming industry
2. Sustainable livelihoods for farmers (particularly small scale & emerging)
3. Food security (access, quantity, nutrition) **(Presidential outcomes)**

And must be labelled to allow consumer choice. **(Consumer Protection Act)**





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THANK YOU

biotechnology
sciences services
break-through entrepreneurs sophistication
people products
health innovation
Bio-economy
knowledge technology agriculture industry

